

REMARKS/ARGUMENTS

The Office Action mailed September 30, 2003 has been reviewed and carefully considered. Claims 2, 3, and 8 are canceled. Claims 1 and 4-7 are pending in this application, with claim 1 being the only independent claim. Reconsideration of the above-identified application in view of the following remarks is respectfully requested.

In the Office Action mailed September 30, 2003, claims 1 and 4-7 stand rejected under 35 U.S.C. §103 as unpatentable over U.S. Patent No. 5,694,968 (Devall) in view of U. S. Patent No. 5,085,773 (Danowski).

Claims 1 and 4-7 stand rejected under 35 U.S.C. §103 as unpatentable over Devall in view of Danowski and further in view of AT 003 803 (Zeigler), FR 2 262 609 (FR '609) and WO 95/03949 (Nemser).

The present invention relates to a ventilation device for a fuel tank which having an antisurge element arranged at the entrance to a ventilation line connected to the fuel tank for allowing fuel vapors and air to pass from the fuel tank to the ventilation line and simultaneously preventing fuel which is sloshing around with in the fuel tank from passing through the antisurge element into the ventilation line (see page 7, lines 10-16 of the specification). For this purpose, the antisurge element comprises a fixed porous sintered part having a plurality of individual channels (see page 7, lines 20-22). The configuration of the channels prevents the fuel from entering the ventilation line but allows gas flow therethrough to provide sufficient equalization of pressure (see page 3, lines 12-15).

Independent claim 1 recites a ventilation device having an antisurge device, wherein the antisurge device comprises a "fixed porous sintered part having a plurality of individual channels", "wherein a configuration of said plural individual channels is operatively arranged for

allowing a flow of a gas medium therethrough and producing a resistance to liquid flow which prevents sloshed fuel in the fuel tank which splashes against said antisurge element from entering said ventilation device".

Devall discloses a tank venting control system having a fill limit and tank ventilation valve 10 mounted in an aperture 34 in a top wall of the tank (see col. 5, lines 40-43 of Devall). The valve 10 includes a vent apparatus 62, a perforated baffle plate 64, and an elongated tubular skirt 66 interconnecting vent apparatus 62 and baffle plate 64 (col. 6, lines 10-12). The vent apparatus 62 includes a valve housing 80 with a valve seat 114 defining a vapor inlet opening 86 therethrough (col. 6, lines 37-39). As shown in Fig. 2, the valve housing 80 is arranged within the skirt 66 in the assembled state. The valve assembly includes a float 134 to control liquid fuel and fuel vapor discharge from the fuel tank (col. 7, lines 7-11). A portion of the float, i.e., closure member 210, faces valve seat 114 and is configured to close the valve seat (col. 7, lines 35-46).

Col. 10, line 45 - col. 11, line 30 of Devall describes the operation of the float 134. This portion of Devall discloses that liquid fuel passes through the holes in the baffle plate 64 and into channel 148 within the skirt 66 (see Fig. 7 and col. 10, lines 61-67). Although the baffle plate may slow down the liquid entering the skirt 66, Devall discloses that the float is responsible for preventing liquid fuel from entering the ventilation lines.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The Examiner refers to the baffle plate 64 and skirt 66 as reading on the claimed anti-surge element and states that it would have been obvious to lengthen the holes of the anti-surge element to prevent the introduction of splashed or sloshed fuel into the equalizing opening. However, the function of the float 134 in the valve assembly 10 would be inoperable if fuel was prevented from entering the skirt 66 and baffle plate 64. Accordingly, Devall contains absolutely no motivation to reconfigure the perforations in the baffle plate 64 and skirt 66 to prevent fuel from entering the equalizing opening with the skirt 66 and baffle plate. Furthermore, there is no teaching or suggestion that merely lengthening the perforations in the baffle plate would prevent fuel from flowing through the baffle plate. Only the present invention discloses that a passive element may be used to allow the flow of air and gas vapors while simultaneously preventing the flow of sloshed fuel therethrough.

The Examiner further states that Danowski teach sintered plastic disks and that it would be obvious to modify the antisurge element to be a sintered part. Danowski discloses a fuel filter having discs through which fuel flows, wherein the discs are designed to remove contaminants from the fuel by acting as strainers (see col. 2, lines 1-7). Even if the sintered discs of Danowski were were combined in the baffle plate and skirt of Devall, there is no teaching or suggestion or motivation for configuring the baffle and skirt to prevent the flow of fuel there through. Danowski fails to provide any suggestion or motivation for using the discs to prevent fuel from entering a ventilation line. In contrast, Danowski discloses that the discs are designed to allow a flow of fuel therethrough.

In view of the above amendments and remarks, it is respectfully submitted that the combined teachings of Devall and Danowski fail to establish a prima facie case of obviousness with regard to the subject matter recited in independent claim 1.

Zeigler discloses a device similar to Devall with a porous body 17 which allows fuel to flow therethrough into chamber 7. This is pointed out on page 6, paragraph 2, lines 5-7 of '803. Although the material of Zeigler is a porous material, Zeigler fails to teach or suggest the flow preventing characteristics of independent claim 1. Therefore, Zeigler also fails to provide motivation for preventing a flow of fuel through the baffle plate of Devall.

Nemser discloses a membrane for organic vapors, i.e., not liquid fuel (see page 4, lines 3-11). A special cell A is required for mounting the membrane. Furthermore, the specific example IX on page 21 of Nemser discloses that the membrane is 0.033 mm thick which is not sufficient for stopping sloshing fuel.

Finally FR '609 discloses a plug 23 and does not provide a detailed disclosure of the plug. There seems to be a membrane 14 above the plug which seems to indicate that the plug 23 does not prevent fuel from flowing through.


Accordingly, there is no teaching, suggestion or motivation in the prior art of record for reconfiguring the channels in the baffle plate and skirt of Devall to prevent the flow of fuel therethrough. Accordingly, it is respectfully submitted that independent claim 1 is allowable over the prior art of record.

Dependent claims 4-7, being dependent on independent claim 1, are deemed allowable for the same reasons expressed above with respect to independent claim 1.

The application is now deemed to be in condition for allowance and notice to that effect is solicited.

Respectfully submitted,

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